NOVA SCOTIA

Transportation and
Public Works

Department of Transportation and Public Works

2004 Customer Satisfaction Survey
Provincial Highway System

Highlights Report

NOVA SCOTIA
Transportation and Public Works

The 2004 Customer Satisfaction Survey - Provincial Highway System was conducted by the Marketing Research Centre for the Department of Transportation and Public Works.

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2004 Customer Satisfaction Survey - Provincial Highway System

The Nova Scotia Department of Transportation and Public Works conducts a Customer Satisfaction Survey to determine and evaluate the public's satisfaction with the provincial highway system. It is also used to determine the department's effectiveness in providing services on the provincial highway system. This report highlights the survey findings[1].

The 2004 Customer Satisfaction Survey is based on telephone interviews with 2068 residents of Nova Scotia, 16 years of age and older. This sample is segmented by four provincial transportation districts:

Central District
Halifax and Hants Counties.

Eastern District
Antigonish, Guysborough, Inverness, Victoria, Cape Breton, and Richmond Counties.

Northern District
Pictou, Cumberland, and Colchester Counties.

Western District
Kings, Annapolis, Digby, Yarmouth, Shelburne, Lunenburg, and Queens counties.

This allows for a comparison and analysis at the district level.

A random sample of 2068 respondents provides a sampling error of plus or minus 2.15%, with a 95% confidence level. The margin of error for each of the four districts is shown in the following table.

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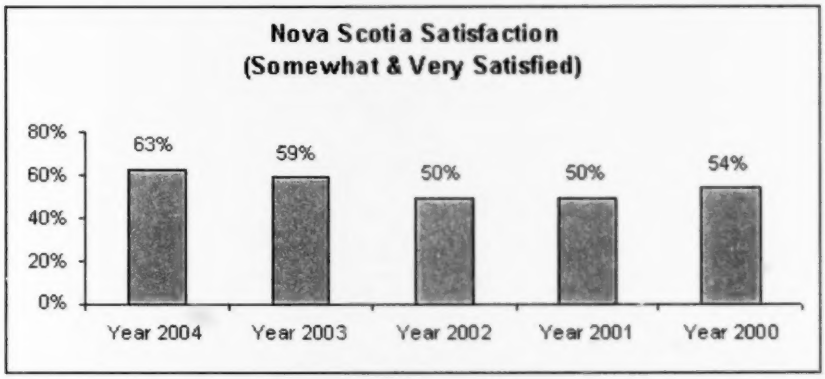
[1] As the data has been weighted to reflect the actual population by district, and percentages have been rounded to the nearest whole number, not all tables will add to 100%.

District	Population (Over 16)	Sample Size	Margin of Error (95% confidence level)
Central	335,850	518	±4.3
Eastern	149,253	517	±4.3
Northern	109,201	516	±4.3
Western	172,342	517	±4.3
Overall	766,646	2068	±2.15

Overall Satisfaction

Overall satisfaction with the provincial highway system is a measurement of all the variables that make up customer satisfaction. There are many variables that can influence the way people respond, for example, the number of motor vehicle accidents that occur in the winter season.

Overall, Nova Scotians were generally satisfied with the provincial highway system. More than six in ten residents from Nova Scotia (63%) felt very or somewhat satisfied with the provincial highway system. This has increased by four percent since 2003.



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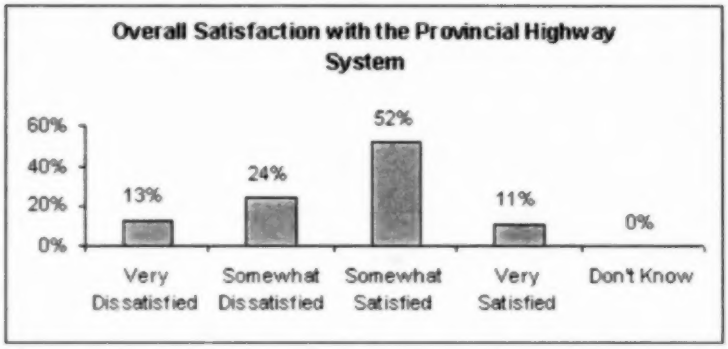

Residents in all of the four districts indicated a higher satisfaction as compared with the results from the 2003 survey. Central District expressed the highest level of satisfaction (66%), while Eastern District expressed the lowest amount of satisfaction (56%).

The Central, Eastern and Northern Districts showed no significant[2] differences in satisfaction from 2003 to 2004. Western District residents were significantly more satisfied[3] in 2004 than in 2003, 2.63 and 2.50 respectively. Residents in the Central District indicated a satisfaction mean[4] of 2.69 in 2003 and 2.69 in 2004. Residents in the Eastern District indicated a satisfaction mean of 2.48 in 2003 and 2.46 in 2004. Residents in the Northern District indicated a satisfaction mean of 2.48 in 2003 and 2.57 in 2004.

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2 Significance testing was done at the 95% confidence level.

3 Mean scores were used to calculate significant differences.

4 Scale: 1 (very dissatisfied), 2 (somewhat dissatisfied), 3 (somewhat satisfied), 4 (very satisfied).

District	Central		Northern		Eastern		Western	
Year	2004 %	2003 %	2004 %	2003 %	2004 %	2003 %	2004 %	2003 %
Very Satisfied	12	13	9	8	9	10	12	9
Somewhat Satisfied	54	52	53	47	47	47	51	47
Somewhat Dissatisfied	23	26	24	28	24	25	26	29
Very Dissatisfied	10	8	14	16	20	18	11	15

Why are Nova Scotians dissatisfied?

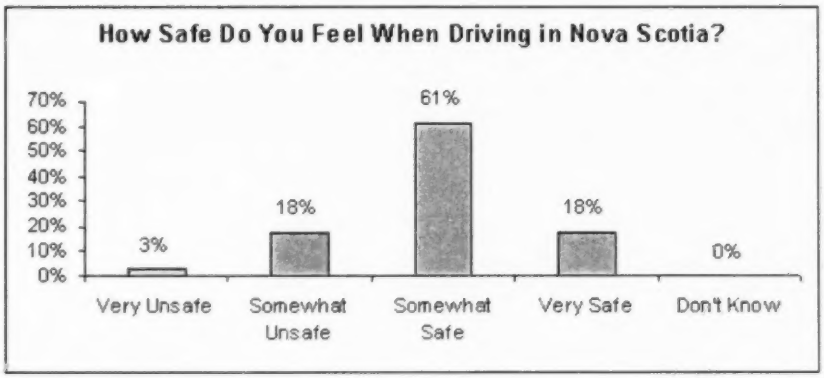
Nova Scotians were dissatisfied for various reasons. The most frequent responses were:

- Roads are poorly paved/maintained
- Potholes on the road
- Poor repair/condition

These responses were also the most frequent responses, in the 2003 Customer Satisfaction Survey.

Safety - Driving

Approximately eight in ten Nova Scotians (79%), indicated that they felt "very safe" or "somewhat safe" when driving on the provincial highways. There was a slight change in how safe residents felt driving in Nova Scotia from 2003, when it was 74%. The survey results suggest that perceived driver safety has the greatest effect on the level of satisfaction with highways in Nova Scotia. The safer a person feels while driving on the highways, the more satisfied they are with the highways.



Percentage who feel safe when driving in Nova Scotia

	2004	2003	2002
Central	81%	78%	71%
Eastern	74%	73%	68%
Northern	81%	74%	70%
Western	79%	71%	68%

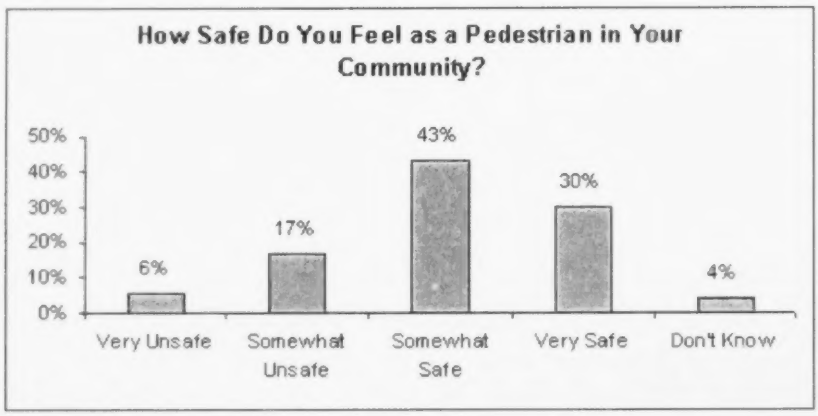
Within the regions, residents in the Northern and Central districts, both 81%, felt more safe while driving on provincial highway systems, which was an increase of 7% and 3% respectively, from 2003. During 2004 all regions had increased their ratings of how safe they feel when driving in Nova Scotia.

Some of reason for Nova Scotians feeling unsafe while driving include:

- Other drivers (17%)
- Traffic, road conditions, poor signage (14%)
- Speeding (12%)

Safety - Walking

Seventy-three percent of residents indicated that they felt either very safe (30%) or somewhat safe (43%) when walking in their community, in Nova Scotia. Seventeen percent felt either somewhat unsafe or very unsafe (6%), another 4% indicated that they didn't know or declined to answer.



Percentage who feel safe when walking in the community in Nova Scotia

	2004
Central	67%
Eastern	75%
Northern	77%
Western	79%

Safety, as a pedestrian walking in their community varied slightly by district. Central District had the lowest safety factor at 67%, followed by the Eastern District at 75%, the Northern District at 77% and the Western District at 79%.

Residents indicated that the main reasons why they felt unsafe when walking in their community, in Nova Scotia, were **lack of proper sidewalk** (28%), **speeding traffic** (18%), **other drivers** (15%) and **poor road conditions** (9%).

Road Safety Measures

	Somewhat Agree 2004 %	Strongly Agree 2004 %
More Severe Penalties for driving Infractions	36	37
More Police Enforcement of Existing Regulations	34	48
Highway Improvements	30	65
Public Education Programs about Safe Driving Habits	40	44
Drivers Being More Careful and Responsible	20	78
Pedestrians Being More Careful and Responsible	37	53
Increased Government Spending on Roads and Highways	27	66

Residents of Nova Scotia agreed that the most important contribution to road safety were **drivers being more careful and responsible** (98%). This was closely followed by **highway improvements** (95%) and **increased government spending on roads and highways** (93%).

Pedestrians being more careful and responsible was rated at (90%), **public education programs about safe driving habits** (84%), **more police enforcement of existing regulations** (82%) and **more severe penalties for driving infractions** (73%).

The Following Will Improve Road Safety by District

	Central	Eastern	Northern	Western	Overall
	Means				
More Severe Penalties for driving Infractions	3.04	3.08	2.86	3.09	3.03
More Police Enforcement of Existing Regulations	3.30	3.31	3.20	3.28	3.28
Highway Improvements	3.55	3.70	3.60	3.61	3.60
Public Education Programs about Safe Driving Habits	3.21	3.36	3.20	3.28	3.25
Drivers Being More Careful and Responsible	3.76	3.78	3.72	3.74	3.75
Pedestrians Being More Careful and Responsible	3.45	3.41	3.35	3.43	3.42
Increased Government Spending on Roads and Highways	3.52	3.70	3.61	3.64	3.60

How important are highway services to Nova Scotians?

Nova Scotians felt that ten of the seventeen highway services were more important in 2004 than in 2003. Six services had significantly increased in importance[5] since the 2003 Customer Satisfaction Survey. One service, Timeliness of cleanup after a storm, had no comparison from 2003.

Significance Testing - Importance

Importance	2004	2003	Change
Amount of four lane divided highways	**3.54**	**3.60**	**-.06**
Filling cracks and potholes	**3.87**	**3.83**	**.04**
Paving sections of the highway	**3.73**	**3.67**	**.06**
Ice and snow removal during a storm	3.87	3.85	.02
Timeliness of a cleanup after a storm	3.82	N/A	N/A
Number of passing lanes	3.53	3.50	.03
Length of passing lanes	3.54	3.55	-.01
All pavement markings	**3.74**	**3.80**	**-.06**
Roadside brush and tree clearing	3.40	3.43	-.03
Helpfulness of non-commercial highway signs such as speed limit signs, road exit signs and so forth	**3.63**	**3.71**	**-.08**
Amount of non-commercial highway signs such as speed limit signs, road exit signs and so forth	3.56	3.53	.03
Maintenance of non-commercial signs such as speed limit signs, road exit signs and so forth	3.61	3.58	.03
Width of highway shoulders	**3.67**	**3.63**	**.04**
Surface condition of highway shoulders	**3.69**	**3.64**	**.05**
Grading and dust control of gravel	3.45	3.43	.02
Ditches and culverts	3.45	3.44	.01
Bridges	**3.62**	**3.76**	**-.14**

*Scale 1(very unimportant), 2(somewhat unimportant), 3(somewhat important), 4(very important)
Significant differences are **bolded

[5] These are based on mean scores for importance ratings.

Four services had a significant decrease[6] from 2003 to 2004, they include:

- Amount of four lane divided highways
- All pavement markings
- Helpfulness of non-commercial highway signs such as speed limit signs, road exit signs and so forth
- Bridges

The four services rated significantly higher from 2003 to 2004 include:

- Filling cracks and potholes
- Paving sections of the highway
- Width of highway shoulders
- Surface condition of highway shoulders.

How do Nova Scotians rate the importance of highway services?

All of the seventeen highway services were important to Nova Scotians. Residents were asked to rate the services as very unimportant, somewhat unimportant, somewhat important and very important.

The top six services that received a high rating with somewhat important and very important include:

- Timeliness of a cleanup after a storm (99%)
- Ice and snow removal during a storm (98%)
- Filling cracks and potholes (98%)
- Paving sections of the highway (97%)
- All pavement markings (97%)
- Surface condition of highway shoulders (96%)

The six lowest ranking services include:

- Grading and dust control (82%)
- Roadside brush and tree clearing (87%)
- Ditches and culverts (88%)
- Amount of four lane divided highways (92%)
- Number of passing lanes (92%)
- Length of passing lanes (92%)

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[6] Significance testing was at the 95% confidence level.

Importance of Highway Services

Importance	Somewhat Important 2003%	Somewhat Important 2004%	Very Important 2003%	Very Important 2004 %
Amount of four lane divided highways	22	28	69	64
Filling cracks and potholes	11	10	87	88
Paving sections of the highway	28	22	70	75
Ice and snow removal during a storm	10	11	87	87
Timeliness of a cleanup after a storm	N/A	16	N/A	83
Number of passing lanes	35	32	57	60
Length of passing lanes	32	32	61	60
All pavement markings	16	21	82	76
Roadside brush and tree clearing	39	34	53	53
Helpfulness of non-commercial highway signs such as speed limit signs, road exit signs and so forth	22	27	74	67
Amount of non-commercial highway signs such as speed limit signs, road exit signs and so forth	33	32	60	62
Maintenance of non-commercial signs such as speed limit signs, road exit signs and so forth	31	29	64	66
Width of highway shoulders	29	25	67	70
Surface condition of highway shoulders	26	24	69	72
Grading and dust control of gravel roads	34	29	51	53
Ditches and culverts	37	35	53	53
Bridges	19	27	79	66

Significance Testing - Quality

Although 2 of 17 services had increased ratings in 2004, they were not significantly different from the ratings given in 2003. Seven of seventeen services were rated significantly lower in 2004, than in 2003.

The services that showed significant decreases[7] in perceived quality between 2003 and 2004 were:

- Filling cracks and potholes
- Ice and snow removal during a storm
- All pavement markings
- Roadside brush and tree clearing
- Helpfulness of non-commercial highway signs such as speed limit signs, road exit signs, and so forth
- Width of highway shoulders
- Surface conditions of highway shoulders

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[7] Significance testing was at the 95% confidence level.

Significance Testing - Quality

Quality	2004	2003	Change
Amount of four lane divided highways	2.49	2.50	-.01
Filling cracks and potholes	**1.90**	**1.97**	**-.07**
Paving sections of the highway	2.26	2.30	-.04
Ice and snow removal during a storm	**2.57**	**2.73**	**-.16**
Timeliness of a cleanup after a storm	2.57	N/A	N/A
Number of passing lanes	2.48	2.46	.02
Length of passing lanes	2.45	2.44	.01
All pavement markings	**2.70**	**2.75**	**-.05**
Roadside brush and tree clearing	**2.54**	**2.60**	**-.06**
Helpfulness of non-commercial highway signs such as speed limit signs, road exit signs and so forth	**2.81**	**2.86**	**-.05**
Amount of non-commercial highway signs such as speed limit signs, road exit signs and so forth	2.73	2.73	0
Maintenance of non-commercial signs such as speed limit signs, road exit signs and so forth	2.77	2.78	-.01
Width of highway shoulders	**2.36**	**2.45**	**-.09**
Surface condition of highway shoulders	**2.31**	**2.38**	**-.07**
Grading and dust control of gravel	2.29	2.31	-.02
Ditches and culverts	2.50	2.50	0
Bridges	2.63	2.61	.02

*Significant differences are **bolded**.

**Scale: 1(poor), 2(only fair), 3(good), 4(excellent)

How do Nova Scotians rate the quality of highway services?

All of the seventeen highway services were important to Nova Scotians. Residents were asked to rate the services as Poor, Only Fair, Good and Excellent.

Very few residents rated the highway services as 'Excellent' although the majority rated most services as 'Good'.

Those services[8] rated highest among residents in 2004 were:

- Helpfulness of non-commercial highway signs such as speed limit signs, road exit signs and so forth
- Maintenance of non-commercial highway signs such as speed limit signs, road exit signs and so forth
- Amount of non-commercial highway signs such as speed limit signs, road exit signs and so forth
- All pavement markings

Those services receiving the lowest rankings in 2004 were:

- Filling cracks and potholes
- Paving sections of the highway
- Grading and dust control
- Surface condition of highway shoulders

Those services rated the highest among residents in 2003 were:

- Helpfulness of non-commercial signs
- Maintenance of non-commercial signs
- Completeness of the cleanup after a storm
- All pavement markings

Those services rated the lowest among residents in 2003 were:

- Filling in cracks and potholes
- Grading/dust control of gravel roads
- Resurfacing sections of the highway
- Length of passing lanes

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[8] These are based upon the mean scores for quality ratings.

Quality of Highway Services

Quality	Good 2003 %	Good 2004 %	Excellent 2003 %	Excellent 2004 %
Amount of four lane divided highways	44	43	8	9
Filling cracks and potholes	25	21	3	3
Paving Sections of the Highway	39	39	5	4
Ice and snow removal during a storm	54	49	12	10
Timeliness of a cleanup after a storm	N/A	49	N/A	9
Number of passing lanes	47	49	5	5
Length of passing lanes	47	47	4	5
All pavement markings	61	59	10	10
Roadside brush and tree clearing	54	51	8	7
Helpfulness of non-commercial highway signs such as speed limit signs, road exit signs and so forth	68	66	10	9
Amount of non-commercial highway signs such as speed limit signs, road exit signs and so forth	63	64	8	7
Maintenance of non-commercial signs such as speed limit signs, road exit signs and so forth	65	67	9	7
Width of highway shoulders	47	43	5	4
Surface condition of highway shoulders	44	40	4	4
Grading and dust control of gravel roads	34	31	3	3
Ditches and culverts	51	49	3	3
Bridges	56	55	7	6

Where are the gaps in highway service?

We can use the information obtained from the 2004 survey results to assist in policy decision making and highway planning. One of the ways to determine service priorities, is to measure gaps that are present between the quality rating that Nova Scotians expressed and what services Nova Scotians consider being important. An important gap exists when the service is considered to be important and the service expectations of these same residents are not being met. Lower gap scores indicate that service expectations are being met, high gap scores show that there is a problem.

Factor	2003 %	2004 %
Amount of four lane divided highways	**61**	**56**
Filling cracks and potholes	85	86
Paving sections of the Highway	**68**	**71**
Ice and snow removal during a storm	75	78
Timeliness of a cleanup after a storm	N/A	75
Number of passing lanes	55	57
Length of passing lanes	58	57
All pavement markings	**74**	**68**
Roadside brush and tree clearing	51	48
Helpfulness of non-commercial highway signs such as speed limit signs, road exit signs and so forth	**66**	**60**
Amount of non-commercial highway signs such as speed limit signs, road exit signs and so forth	56	57
Maintenance of non-commercial signs such as speed limit signs, road exit signs and so forth	59	60
Width of highway shoulders	65	67
Surface condition of highway shoulders	67	68
Grading and dust control of gravel roads	45	45
Ditches and culverts	51	50
Bridges	**72**	**59**

*Significant differences are **bolded**.

It is the fifth year in a row that **filling cracks and potholes** has produced the largest gap value (86%). This is a strong indication that the Department of Transportation and Public Works is not providing sufficient services in regard to filling cracks and potholes. Across the province there were differences in gap scores for this service. The Western District received the highest gap score with 88%, while Eastern showed the lowest gap score with 84%. The overall score has increased from 85% in 2003 to 86% in 2004.

Surface condition of shoulders has increased this year with a score of 68%. The gaps score for this service has increased from 67% in 2003. Northern District yielded the lowest gap score of 66%, while the other three district's gap scores ranged from 66% to 73%.

Width of highway shoulders produced a gap score of 67% in 2004. This is an increase of 2% from the 2003 gap score. The district gap scores ranged from 66% (Central and Northern) to 70% (Western).

All pavement markings including yellow and whites lines had decreased by 6% from 2003, leaving it with a gap score of 68% in 2004. Following 2003's decrease of 5%, indicating that Nova Scotians feel that this isn't a large problem within the province. District gap scores ranged from 67% (Central and Western) to 71% (Northern).

The gap score for **ice and snow removal**, the second largest gap score, had increased 3 percentage points from last year, giving it a 78% gap score for 2004. The district level ice and snow removal scored high with each district. Eastern and Northern being the highest with gap scores of 78% and 80% and Central and Western with slightly less scores of 77%, and 75% respectively.

The gap for **timeliness for the clean up (after a storm)** was similar, with the third largest gap score, with a score of 78%. District gap scores ranged from 72% (Eastern) to 78% (Northern).

Paving sections of the highway, yielded a gap score of 71%, this has increased from last year's score of 68%. Eastern District showed the lowest gap score (69%) while Central District showed a score of 72%, Northern with 73%, and Western with 71%.

Ninety three percent of Nova Scotians indicated that **bridges** were somewhat important or very important. However, only 6% of these same residents indicated that they felt the Department of Transportation and Public Works was doing an excellent job in regard to bridges. This produced a gap of 59%, this score has decreased 13 percentage points from last year, 2003, when it was 72%. Eastern District (56%) had a lower gap score than the other three Districts, which ranged from 56% to 63%.

Services regarding **helpfulness, amount and maintenance of non-commercial signs** produced gap scores of 60%, 57% and 60%, respectively, all of which showed a change from last year. Helpfulness decreased by 6%, maintenance increased by 1% and the amount of non-commercial highway signs such as speed limit signs, road exit signs and so forth increased by 1% from the 2003 results. The Western District had the highest gap scores at 66%, 62% and 66% respectively.

The gap score for the **amount of four-lane divided highways** has continued to decrease in percentage. The 2004 gap score showed a percentage of 56, indicating that the Department of Transportation and Public works was doing an excellent job. The Northern District was the highest with a gap score of 60%.

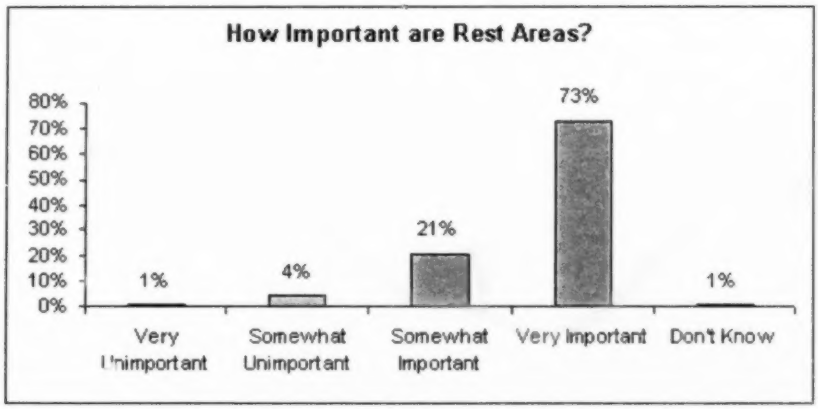
The **number and length of passing lanes** each had gap scores of 57%. The number of passing lanes has increased 2% from last year, while the length of passing lanes has decreased by 1%. The Western District showed the highest gap scores for both the number and length of passing lanes with 64% and 62%, respectively.

Roadside brush and tree clearing, and **grading and dust control of gravel roads** had gap scores of 48% and 45%, respectively. The roadside brush and tree clearing gap scores have decreased by 3% from 2003 results, while grading and dust control stayed constant with a 45% gap score.

Ditches and culverts produced a small gap score of 50%. A decrease of 1% for 2004 following a decrease of 11% from the 2003 gap score. This suggests the TPW is meeting expectations with regards to ditches and culverts. The Eastern District of the province showed the lowest gap score of 44%, and Western had the highest (56%).

Rest Areas

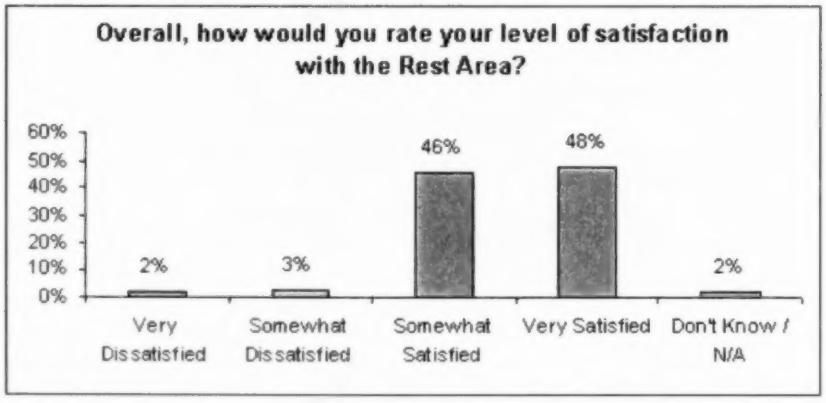
When asked about how important rest stops were on our provincial highways, more than nine in ten residents indicated that they were somewhat (21%) or very (73%) important.



The top three reasons why residents felt that rest stops were not important are as follows:

- Many places to pull over (31%)
- Not important/don't use them (29%)
- Small province, short travelling, no need (19%)

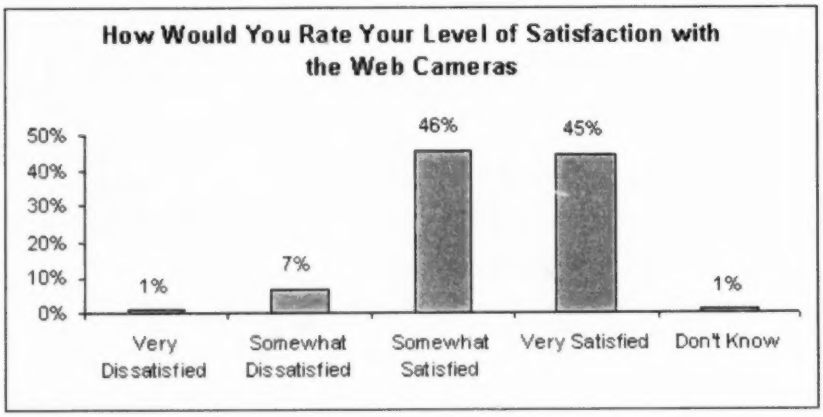
Just less than a third of the residents (29%) indicated that they had used the rest area on Highway 104, Exit 21, which is located between Salt Springs and Stellarton. More than nine in ten residents who used this rest area felt somewhat (46%) or very (48%) satisfied.



Web Cameras

When asked if you have ever used the web cameras on TPW's website, 23% of Nova Scotia residents indicated yes. Thirty-eight percent of residents who drove over 40,000KM per year had used the web cameras.

More than nine in ten residents indicated that they were somewhat (46%) or very (45%) satisfied with the web cameras on the Nova Scotia Department of Transportation and Public Works web site.

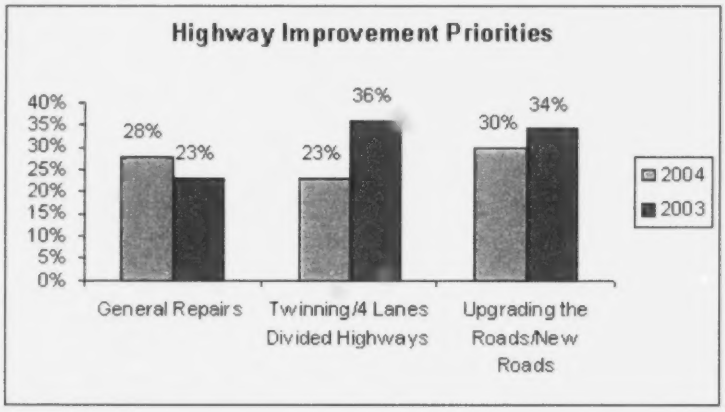


The top two reasons residents felt dissatisfied were:

- Cameras do not show clear pictures (37%)
- Cameras not up to date (33%)

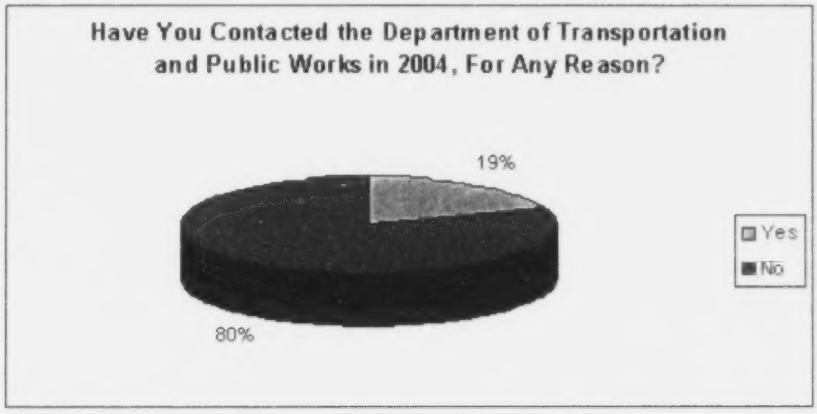
Highway Improvement Priorities

Overall, 30%, of Nova Scotians indicated that they felt top priority should be placed on **upgrading the roads/new roads**. **General repairs** was also looked at by 28% of Nova Scotians as important and needing to be improved. Twenty-three percent of residents felt that **twinning/4 lane divided highways** should be the priority of the Nova Scotia Department of Transportation and Public Works.

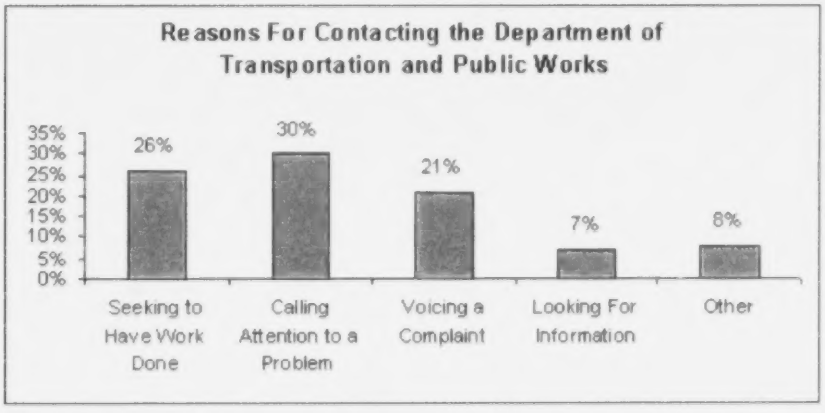


Communication with Staff

Relatively few residents of Nova Scotia contacted the Department of Transportation and Public Works in the past year.



Overall, 19% of Nova Scotians indicated that they had contacted the Department of Transportation and Public Works in the past year, 80% indicated that they had not[9]. Nova Scotians indicated several reasons for the contact, the majority of those reasons related to calling attention to a problem, seeking to have work done, or voicing a complaint.



The majority (51%) of residents were either somewhat (30%) or very satisfied (21%) with the response from the department.

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[9] May not add to 100% due to rounding.

How is this information used?

This Customer Satisfaction Survey assists the Department of Transportation and Public Works in several ways. This survey is used to:

- Assist TPW in finding ways to improve service delivery; for example, formulating service standards
- Report on TPW's performance in the area of customer satisfaction as part of the government-wide performance measurement process
- Support departmental planning and decision making

The identification of gaps between the level of service customers expected and what they believed they received, revealed a number of service areas in which improvements could be made. This analysis provides the Department of Transportation and Public Works with a reliable tool for making choices on providing highway services in the future. Improvements in service delivery may be limited, due to budgetary or other constraints. However, through incremental improvements to services and by communicating the department's limitations TPW can begin to work toward addressing the existing gaps in the services in a systematic manner.